Multimedia System B E I T Sem VII 19/5/14

QP Code : MV-19998

(3 Hours) **[Total Marks : 100**

Instructions to the candidates, if any:-

N.B. : (1) Question No. 1 is compulsory.

(2) Attempt any four questions out of remaining six questions.

Q.1 (a) What is Multimedia? List different categories of Multimedia Software Tools with proper example. (10)

(b) [i] Define various objects used in Multimedia System. (5)

[ii] Explain the need of segmentation in processing in image databases. (5)

Q.2 (a) Explain how RTP with RTCP and RSVP are used for multimedia data transmission. (10)

(b) Draw neat labeled diagram for a Decoder and Encoder of H.261 and explain its working in details (10)

Q.3 (a) With the help of block diagram explain Baseline JPEG compression in details (10)

(b) Explain MIDI file format in detail. (10)

Q. 4 (a) Explain Object based visual coding and video bit stream in MPEG-4. (10)

(b) List and explain different Color Model used in Image and Video. (10)

Q.5 (a) Compare between RIFF and TIFF file formats. (10)

(b) Explain in detail about MPEG-4 and also compare between MPEG-2 and MPEG-7 . (10)

Q. 6 (a) Explain Speech Coding using ADPCM and write in detail about G.726. (10)

(b) Explain different techniques and terminologies use in multimedia network. (10)

Q. 7 Write short notes on (Any Four) (20)

i) Multimedia Presentation and Authoring

ii) Adaptive Huffman coding

iii) Descriptors in MPEG-4

iv) TV trees in text databases

v) VRML

vi) Multimedia over Wireless Networks.

Con. 10564-14.

Sem VII IT DWM1 23/05/14.

QP Code : MV-20069

(3 Hours) **[Total Marks : 100**

N. B. (1) Question no. 1 compulsory.
(2) Answer any four out of the remaining questions.

Q.1 Attempt 20
a) What are major issues in data mining?
b) Explain different OLAP operations.
c) Difference between database and data warehouse.
d) Write a short note on Linear regression.

Q.2 a) Explain constraint based and multilevel association rules with an example. 10
b) Explain market basket analysis and uses of it. 10

Q.3 a) Explain BIRCH method of clustering with an example. 10
b) Explain Regression. Write short note on Non-linear regression. 10

Q.4 a) Explain data cleaning, data transformation and Integration with an example. 10
b) Apply Bayesian classification to predict class of new tuple (Nicol, Female, 1.67m), Use the following data. 10

Person ID	Name	Gender	Height	Class
1	Kristina	Female	1.6 m	Short
2	Jim	Male	2 m	Tall
3	Maggie	Female	1.9 m	Medium
4	Martha	Female	1.85 m	Medium
5	John	Male	2.8 m	Tall
6	Bob	Male	1.7 m	Short
7	Clinton	Male	1.8 m	Medium
8	Nyssa	Female	1.6 m	Short
9	Kathy	Female	1.65 m	Short

Q.5 a) What are outlier. Explain outlier analysis. 10
b) Explain K-means clustering and solve the following with k=3 10
{2,3,6,8,9,12,15,18,22}

Q.6 a) Explain Business Intelligence issues. 10
b) Describe the steps involved in data mining when viewed as a process of Knowledge discovery. 10

Q.7 Short note on any **Three** 20
a) Application of Web Mining
b) Market segmentation
c) Sequence Mining in transaction
d) Agglomerative clustering.

Con. 11903-14.